

BONDERITE**BONDERITE C-AK ETCH 9HL AERO**

Known as TURCOFORM ETCHANT 9H-L

January 2015

PRODUCT DESCRIPTION

BONDERITE C-AK ETCH 9HL AERO provides the following product characteristics:

Technology	Metal Pretreatment
Product Type	Alkaline Cleaner Etchant
Application	Immersion process

BONDERITE C-AK ETCH 9HL AERO is a specially compounded liquid etchant for use on high copper aluminium alloy in the Chem-Mill Process. BONDERITE C-AK ETCH 9HL AERO has also been used with other aluminium alloys with superior results.

Application Areas

BONDERITE C-AK ETCH 9HL AERO is a chemical milling etchant.

TECHNICAL DATA

Appearance	brown liquid
Density, g/ml	1.37 to 1.45

DIRECTION OF USE**Preliminary Statement**

Prior to use it is necessary to read the **Material Safety Data Sheet** for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labeling, the relevant precautions should always be observed. Please also refer to the local safety instructions and contact Henkel for analytical support.

Use instructions**Equipment:**

Tank: Mild steel, no lining required.

Agitation: Mild steel, no lining required.

Solution make-up

BONDERITE C-AK ETCH 9HL AERO 14,5 % by volume, N1=6

Alketch inhibitor 3.75 %, N2=2

Temperature 85 - 90° C

Fill the etch tank with water to approximately two-thirds of operating level. With continuous agitation add the required amount of BONDERITE C-AK ETCH 9HL AERO. After the solution is thoroughly mixed, and while continuing to mix, add the required amounts of BONDERITE C-AD ETCH Add3 AERO (or #3B) and ALKETCH INHIBITOR L. Continue agitation and add water to the planned operating level. After thorough mixing, check the N1 and N2 values by titration and adjust as required. To the freshly prepared (not rejuvenated) etchant solution the ALKETCH INHIBITOR-L should be added at the rate of 29 ml/liter of solution to increase the N2 value by 1 ml. Maintaining the ALKETCH INHIBITOR-L at the proper level (by control of N2) will yield optimum results in line definition and etch factor uniformity.

For information on equipment, processing, rejuvenation, solution control and recommended ranges of N1 and N2 for various aluminum alloys, refer to BONDERITE C-AK ETCH 9H AERO Product Data Bulletin.

Storage

Temperature, °C	10 to 40
Shelf-life (in unopened original packaging), months	24

Classification

Please refer to the corresponding **Material Safety Data Sheets** for details on:

Hazardous Information
Transport Regulations
Safety Regulations



ADDITIONAL INFORMATION

Disclaimer

Note:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:

In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation, Resin Technology Group, Inc., or Henkel Canada Corporation, the following disclaimer is applicable:

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

Trademark usage

Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 0.0